

WHAT IS CLAIMED IS:

1. A control system for a network processing system which includes a plurality of network processors and at least one control point unit, and wherein each control point unit is directly connected to a different network processor, each of said
5 network processors having at least three pico processors, one of which is a guided cell handler, one of which is a guided table handler, and the rest of which are general data handlers;

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10 a control information path between each said control point unit and the guided cell handler on the network processor connected directly thereto and between the guided cell handler of each network processor, and a data path between each control point unit and the general data handler on said network processor connected directly thereto and between the general data handler on each of said network processors,

whereby control information can be transferred and controlled independently of said data.

15 2. The invention as defined in claim 1 wherein said tree building information is carried on said control information path.

20 3. The invention as defined in claim 1 wherein there is a communication path between the guided cell handler and the general data handler on each network processor.

4. The invention as defined in claim 1 wherein there is a communication path between the guided tree handler and the general data handlers on each network processor

5 5. The invention as defined in claim 1 wherein said guided cell handler can function as a general data handler.

6. The invention as defined in claim 1 wherein at least one network processor is a secondary network processor connected to a control point unit through a
10 primary network processor which is connected directly to said control point unit.

7. The invention as defined in claim 6 wherein communication with said control point and said secondary network processor is through said primary network processor.
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8. The invention as defined in claim 7 wherein said communication of control information between said control point and said secondary network processor is through the guided cell handler on said primary network processor.

20 9. The invention as defined in claim 1 wherein there are a plurality of general data handlers on each network processor.

10. The invention as defined in claim 1 wherein responses when required are carried on said control path.

5 ~~11.~~ A method of controlling information and data flow in a network processing system which includes a plurality of network processors and at least one control point unit, and wherein each control point unit is directly connected to a different network processor, each of said network processors having at least three pico processors, one of which is a guided cell handler, one of which is a guided table handler, and the rest
10 of which are general data handlers.

sending control information on a path between each said control point unit and the guided cell handler on the network processor connected directly thereto and between the guided cell handler of each network processor, and general data on a data path between each control point unit and the general data handler on said network processor
15 connected directly thereto and between the general data handler on each of said network processors,

whereby control information is transferred and controlled independently of said data.

20 12. The invention as defined in claim 11 wherein said tree building information is carried on said control information path.

13. The invention as defined in claim 11 wherein there is a communication path between the guided cell handler and the general data handler on each network processor.

5 14. The invention as defined in claim 11 wherein there is a communication path between the guided tree handler and the general data handlers on each network processor.

10 15. The invention as defined in claim 11 wherein said guided cell handler can function as a general data handler.

15 16. The invention as defined in claim 11 wherein at least one network processor is a secondary network processor connected to a control point unit through a primary network processor connected to said control point unit.

17. The invention as defined in claim 16 wherein communication with said control point and said secondary network processor is through said primary network processor.

20 18. The invention as defined in claim 17 wherein said communication of control information between said control point and said secondary network processor is through the guided cell handler on said primary network processor.

